

STATEMENT OF BASIS

BF Goodrich Tire Manufacturing
Tuscaloosa, AL
Tuscaloosa County
413-0024

This proposed Title V Major Source Operating Permit renewal is issued under the provisions of ADEM Admin. Code R. 335-3-16. The above named applicant has requested authorization to perform the work or operate the facility shown on the application and drawings, plans, and other documents attached hereto or on file with the Air Division of the Alabama Department of Environmental Management, in accordance with the terms and conditions of this permit.

BF Goodrich – Tuscaloosa currently manufactures light truck and passenger car rubber tires. BF Goodrich was issued its existing Major Source Operating Permit (MSOP) on October 4, 2006, with an expiration date of August 31, 2010. Per ADEM Rule 335-3-16-.12(2), an application for permit renewal shall be submitted at least six (6) months, but not more than eighteen (18) months, before the date of expiration of the permit. Based on this rule, the application for renewal was due to the Department no later than February 28, 2010, but no earlier than February 28, 2009. An application for permit renewal was received by the Department on February 26, 2010. No additional information was deemed necessary for processing of this MSOP. The proposed MSOP will expire in August 31, 2015.

The following sources are significant sources of air pollution for this facility:

Processes:

- EU001 – Mixing
- EU002 – Rubber Preparation (Extruding, Calendaring, Milling, and Cutting)
- EU003 – Tread End Cementing
- EU004 - Tire Building
- EU005 – Curing
- EU006 – Finishing
- EU007 – Boilers No. 1
- EU008 – Boilers No. 3 and No. 4

MSOP Changes

1. Incorporate the following Air Permits:
 - a. 413-0024-X111 “Seven 1st and 2nd Stage Tire Builders (Specialty Racing Tires)”
 - b. 413-0024-X112 “Seven Curing Presses and One Manual Green Tire Sprayer”
 - c. 413-0024-X113 “One RIS Grinder (C-Module)”
2. Section 502 (b)(10) Modification
 - a. Replace the existing No. 2 green tire painter with a new green tire painter (designated as No. 6)
3. Mixer 9 Replacement
4. Recoup Oven 502 (b) 10 Modification
5. Units decommissioned (Curing Presses, C-Modules, and Boiler No.2)

Mixing

The mixing process (collectively referred to as EU001) consists of the following units:

- Farrell Mixers No. 1, No. 2, No. 7, No. 8, and No. 9
- Filler Transfer System
- Mixing Lines No. 1, No. 2, No. 7, and No. 9 Mills (11)
- Mixing Lines No. 7 and No. 8 Extruders (2)
- Dust Collectors and Filters (F1-3, F6-8, F11-13, F91-93, F100, F200, F911-913, F921-923)

Modification:

On October 27, 2009, the Department received an application from BF Goodrich (BFG3) Tire Manufacturing to replace Mixer 9. The existing unit had lost some of its original capacity over time due to wear and tear. The new mixer will also be referred to as “Mixer 9” and meet all the existing requirements. The existing dust collectors (F93, F911-913, and F921-923) will not be replaced and will be used to control emissions on the proposed mixer

Air permit 413-0024-X114 was issued on December 7, 2009.

Applicability:

- These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, “*Major Source Operating Permits*”.
- These sources are subject to ADEM Admin. Code R. 335-3-4-.04(1), “*Control of Particulate Emissions for Process Industries - General*”.
- These sources are subject to ADEM Admin. Code R. 335-3-4-.01(1), “*Control of Particulate Emissions – Visible Emissions*”.
- These units have enforceable limits in place in order to prevent them from being subject to the provisions of ADEM Admin. Code R. 335-3-14-.04. “*Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]*”.
- Per §63.5982(b)(4), these units are subject to the applicable provisions of 40 CFR 63 Subpart XXXX, “*National Emissions Standards for Hazardous Air Pollutants for Rubber Tire Manufacturing*”. However, this section states the following: “There are no emission limitations or other requirements for the rubber processing affected source”.
- The mixers are subject to the applicable requirements of 40 CFR 64, “*Compliance Assurance Monitoring*”. During the 2006 renewal of the MSOP, BFG requested PM limits to ensure that the potential to emit, including the effect of control devices, is less than 100 TPY. This was to prevent the facility from being required to collect four or more data values per hour as required in §64.3(b)(4)(i). BFG will continue to operate under these limitations and the CAM plan that was previously proposed is still assumed to be acceptable monitoring. This monitoring is described below:

CAM Emission Monitoring:

The following 40 CFR 64 Compliance Assurance Monitoring requirements apply to emission points F11, F12, F13, F1, F2, F3, F6, F7, F8, F91, F92, and F93:

- An observation of instantaneous visible emissions from each baghouse shall be accomplished weekly while in operation.
- If the observed instantaneous opacity from any baghouse is greater than ten (10%) percent, a visible emissions observation shall be conducted within **thirty (30) minutes** of the observation in accordance with 40 CFR 60 Appendix A, Method 9 for a minimum of twelve (12) consecutive minutes.
- If the average opacity during the Method 9 visible emission observation exceeds ten (10%) percent, corrective action shall be initiated within **two (2) hours**.
- The facility shall inspect and clean each baghouse no less frequently than annually and whenever visible emissions are observed.
- A properly maintained and operated device shall be utilized to measure the pressure differential (ΔP) across each baghouse. Each device shall be located at eye level and be easily accessible for inspections by Air Division and plant personnel.
- Pressure drop (ΔP) across each baghouse shall be monitored and recorded daily while the units are operating.
- If the observed pressure drop (ΔP) is less than one-half (0.5) inch of water or greater than fifteen (15) inches of water, corrective action shall be initiated within **two (2) hours**.

CAM Recordkeeping and Reporting Requirements:

- If a visible emissions observation utilizing Method 9 is required, the results shall be documented using the ADEM visible emissions observation report. These records shall be maintained for a period of at least five (5) years from the date of generation and shall be made available to the permitting authority upon request.
- Records of the observation date, observation time, emission point designation, emission point operation mode, name of the observer, observed opacity, and any corrective actions taken during each visible emissions observation shall be kept in a permanent form suitable for inspection. These records shall be maintained for a period of at least five (5) years from the date of generation and shall be made available to the permitting authority upon request.
- Records documenting daily pressure drop (ΔP) readings and any corrective actions taken during each pressure drop (ΔP) excursion shall be kept in a permanent form suitable for inspection. These records shall be maintained for a period of at least five (5) years from the date of generation and shall be made available to the permitting authority upon request.
- A semi-annual monitoring report shall be submitted to the Department according the following schedule:

Reporting Period	Due Date
September 1 st thru February 28 th (or 29 th)	April 29 th

March 1 st thru August 31 st	October 30 th
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- Each semi-annual report shall contain the following information:
 - A detailed description of every instance in which visible emissions greater than ten (10%) percent were observed, to include the date, time, cause of the visible emissions, and the corrective action taken.
 - A copy of every ADEM visible emissions observation report generated during the reporting period.
 - A description of every instance in which pressure the observed pressure drop was less than one-half (0.5) inch of water and greater than fifteen (15) inches of water, to include time, date, observed pressure drop, cause of the increased or decreased pressure drop, and the corrective action taken.
 - A statement certifying that all required monitoring, recordkeeping, and reporting requirements were accomplished as required.

Emissions Standards:

- *Opacity*

ADEM Admin. Code R. 335-3-4-.01(1)(a)(b), states no person shall discharge particulate emissions of an opacity greater than that designated as twenty (20%) opacity, as determined by a six minute average. During one six (6) minute period in any sixty (60) minute period, a person may discharge into the atmosphere from any source of emission forty (40%) percent opacity.

- *Particulate*

These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.04(1), “*Process Industries – General*”. The allowable emissions from each unit shall not exceed that which is calculated using the process weight equations as defined in ADEM Admin. Code R. 335-3-4-.04(1).

Since the allowable emissions as defined in ADEM Admin. Code R. 335-3-4-.04(1) exceed 100 TPY for the following units, BFG has requested the following PM emissions limits to ensure that the potential to emit, including the effect of control devices, is less than 100 TPY:

Emission Point	Allowable Emissions (lb/hr)	Allowable Emissions (TPY)
F11	21.7	95.0
F12	21.7	95.0
F13	21.7	95.0
F1	21.7	95.0
F2	21.7	95.0
F3	21.7	95.0
F6	21.7	95.0
F7	21.7	95.0
F8	21.7	95.0

F91	21.7	95.0
F92	21.7	95.0
F93	21.7	95.0

PM emissions from the above listed emission points shall not exceed the lesser of that which is calculated using the process weight equation, as defined in ADEM Admin. Code R. 335-3-4-.04(1), or the requested PM limit as stated above.

Particulate matter (PM) emissions from Mixing Line No. 9 shall not exceed 3.42 lb/hr (*ADEM Admin. Code R. 335-3-14-.04 – Anti-PSD*).

- *Volatile Organic Compounds*

No more than 444,444 lbs of silane may be used at the facility in any consecutive 12-month period. (*ADEM Admin. Code R. 335-3-14-.04*)

VOC emissions associated with the use of silane shall not exceed 38 TPY during any consecutive twelve month period. (*ADEM Admin. Code R. 335-3-14-.04*)

Compliance and Performance Test Methods and Procedures:

- If testing is required, particulate matter (PM) emission shall be determined in accordance with Method 5 of 40 CFR 60, Appendix A.
- If testing is required, volatile organic compound (VOC) emissions shall be determined in accordance with Method 25A of 40 CFR 60, Appendix A.
- Visible emissions observations (VEO) shall be conducted in accordance with Method 9 40 CFR 60, Appendix A.

Emission Monitoring:

- Expected emissions from the units which are not subject to CAM are relatively small. Therefore, no other emission monitoring is required for these units. See CAM Appendix.

Recordkeeping and Reporting Requirements:

- Records summarizing the monthly and twelve (12) month rolling total of silane usage at this facility shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.
- Monthly and updated twelve (12) month silane usage shall be compiled no later than the tenth (10th) day of the month following each monthly reporting period.

Emissions:

Per air permit application forms submitted, the potential emissions from these units are as follows:

Emission	Pollutant	Allowable	Uncontrolled	Controlled
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Point		Emissions		Potential Emissions		Potential Emissions	
		(lb/hr)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)
EU001	PM/PM ₁₀	**	**	1,999	8,755	9.3	40.5
	VOC	8.68	38.0	19.5	85.4	8.68*	38.0*
	Total HAP			3.00	13.0		

*-Silane usage limits the amount of VOC emitted

** - Allowable PM emissions shall not exceed the lesser of that which is calculated by the process weight equation in ADEM Admin. Code 335-3-4-335-3-4-.04(1) or 21.7 lb/hr (95.0 TPY).

Rubber Preparation (Extruding, Calendaring, Milling, and Cutting)

These processes (collectively referred to as EU002) consist of the following significant units:

- 4-Roll Fabric Calender
- Fabric Calender Mills (3)
- Adamson Wire Calender
- Wire Calender Mills (4)
- 3-Roll Innerliner Calender
- Innerliner Calender Mills (4)
- 2-Roll Gum Edge Calender
- Gum Edge Calender Mills (2)
- Cutters
- Tread Line No. 1 and No. 2 Extruders
- Tread Line No. 2 Mills (4)
- Apex Line Extruders
- Apex Line Mills (3)
- White Sidewall Line (No. 2)
- Fill and Flip Units (7)
- STS Treadline
- Bead Apexers (5)
- Bead Winders (2)

Applicability:

- These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, *“Major Source Operating Permits”*.
- Per §60.540, these units are not subject to the applicable provisions of 40 CFR 60 Subpart BBB, *“Standards of Performance for the Rubber Tire Manufacturing Industry”*. These units are not listed as affected facilities in §60.540(a).
- Per §63.5982(b)(1), the tire production processes that use or process cements and solvents are subject to the applicable provisions of 40 CFR 63 Subpart XXXX, *“National Emissions Standards for Hazardous Air Pollutants for Rubber Tire Manufacturing”*.
- Per §63.6013, the tire production processes that use or process cements and solvents are subject to the applicable provisions of 40 CFR 63 Subpart A, *“General Provisions”* as listed in Table 17 of 40 CFR 63 Subpart XXXX.
- These units are not subject to 40 CFR 64, *Compliance Assurance Monitoring*. Emissions from these units are uncontrolled.

Emissions Standards:

- There are no unit specific emissions standards for these units.

Compliance and Performance Test Methods and Procedures:

- If testing is required, volatile organic compound (VOC) emissions shall be determined in accordance with Method 25A of 40 CFR 60, Appendix A.

Emission Monitoring:

- There are no unit specific emissions monitoring requirements applicable to these units.

Recordkeeping and Reporting Requirements:

- There are no unit specific recordkeeping or reporting requirements applicable to these units.

Emissions:

Per air permit application forms submitted, the emissions from these units are as follows:

Emission Point	Pollutant	Allowable Emissions		Uncontrolled Potential Emissions	
		(lb/hr)	(TPY)	(lb/hr)	(TPY)
EU002	VOC	N/A	N/A	4.8	21.8
	Total HAP	N/A	N/A	1.37	6.01

Tread End Cementing and Marking

This process, collectively referred to as EU003, consists of the following units:

- Tread End Cementing and Centerline Marking Lines No. 1 and No. 2

Applicability:

- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, “*Major Source Operating Permits*”.
- This unit has enforceable limits in place in order to prevent it from being subject to the applicable provisions of ADEM Admin. Code R. 335-3-14-.04. “*Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]*”.
- Per §60.540, the tread end cementing portion of this unit is subject to the applicable provisions of 40 CFR 60 Subpart BBB, “*Standards of Performance for the Rubber Tire Manufacturing Industry*”.
- The tread end cementing portion of this unit is subject to the applicable provisions of 40 CFR 60 Subpart A, “*General Provisions*”.
- Per §63.5982(b)(1), these units are subject to the applicable provisions of 40 CFR 63 Subpart XXXX, “*National Emissions Standards for Hazardous Air Pollutants for Rubber Tire Manufacturing*”.
- Per §63.6013, these units are subject to the applicable provisions of 40 CFR 63 Subpart A, “*General Provisions*” as listed in Table 17 of 40 CFR 63 Subpart XXXX.
- These units are not subject to 40 CFR 64, *Compliance Assurance Monitoring*. Emissions from these units are uncontrolled.

Emissions Standards:

- *VOC*

Per §60.542(a)(3), each tread end cementing operation shall discharge no more than 10 grams of VOC per tread cemented for each month.

No more than a total of 131.2 tons of VOC may be emitted from these units during any consecutive twelve month period. (ADEM Admin. Code 335-3-14-.04 – *Anti-PSD*)

- *HAP*

BFG has been complying with the subpart using the Monthly Average Alternative without an Add-on Control Device – Constituent Based Option, as outlined in §63.5985(b) and Option 1 of Table 1 of 40 CFR 63 Subpart XXXX. The facility intends to continue to comply using this method.

HAP emissions are limited to the following as stated in Option 1 of Table 1 to Subpart XXXX:

- Emissions of each HAP listed in Table 16 of Subpart XXXX shall not exceed 1,000 grams of HAP per megagram (2 lb per ton) of total cements and solvents used.
- Emissions of each HAP not listed in Table 16 of Subpart XXXX shall not exceed 10,000 grams of HAP per megagram (20 lb per ton) of total cements and solvents used

Compliance and Performance Test Methods and Procedures:

- If water based cements containing less than 1.0 percent VOC (by weight) are used in the tread end cementing operation, formulation data or the results of Method 24 analyses shall be submitted to the Department annually, provided that the formula has not changed during the previous twelve (12) months. (§60.543(b)(4))
- If water based cements containing 1.0 percent VOC (by weight) or more are used in the tread end cementing operation, then the following procedure shall be used to determine compliance with the VOC emission limit per tire: (§60.543(d)(1)(2)(3)(i)(ii)(iii)(4)(5))
 - Determine the density and weight fraction of VOC in each cement from its formulation data or by analysis of the cement using Method 24.
 - Calculate the total mass of VOC used at the affected facility for the month (M_o) using the following equation:

$$M_o = \sum_{i=1}^a L_{c(i)} \times D_{c(i)} \times W_{o(i)}$$

Where:

a = the different number of cements used during the month

L_c = volume of cement used during the for a month

D_c = density of cement used

W_o = weight fraction of VOC in a cement

- Determine the total number of tires (T_o) cemented for the month.
- Calculate the mass of VOC used per tire cemented for the month (G) using the following equation:

$$G = \frac{M_o}{T_o}$$

- Calculate the mass of VOC emitted per tire cemented for the month (N):

$$N = G$$

- Method 311 of 40 CFR 63 Appendix A or supplier formulation data or shall be used in the determination of HAP content in any cement or solvent used in this process. (§63.5994(a))
- In order to demonstrate compliance with the HAP constituent emission limits in Option 1 of Table 1, the following procedures shall be used: (§63.5994(b)(1)(2))

- Determine the mass percent of each HAP in each cement and solvent used in this process
- Calculate the HAP emission rate for each monthly operating period using the following equation:

$$E_{\text{month}} = \frac{\left[\sum_{i=1}^n (HAP_i)(TMASS_i) \right] (10^6)}{\sum_{i=1}^n TMASS_i}$$

Where:

E_{month} = mass of specific HAP emitted per total mass cements and solvents from all cements and solvents used in tire production per month (g/Mg)

HAP_i = mass percent (expressed as a decimal) of the specific HAP in cement and solvent “i” as purchased

$TMASS_i$ = total mass of cement and solvent “i” used in the month (g)

n = number of cements and solvents used during the month

Emission Monitoring:

- Emissions from these units shall be monitored through recordkeeping practices.

Recordkeeping and Reporting Requirements:

- Records of VOC content of any cements or sprays used in this process shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation. (*ADEM Admin. Code 335-3-16-.05(c)(2)*)
- Records summarizing the monthly and twelve (12) month rolling total of VOC emissions from these units shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation. (*ADEM Admin. Code 335-3-16-.05(c)(2)*)
- Monthly and updated twelve (12) monthly VOC emissions records shall be compiled no later than the tenth (10th) day of the month following each monthly reporting period. (*ADEM Admin. Code 335-3-16-.05(c)(2)*)
- During any month, twelve (12) month period, or other compliance period during which there is an exceedance of the VOC emission limit, the Department shall be notified in writing within ten (10) days of determining the exceedance. The notification shall include the following: (*ADEM Admin. Code 335-3-16-.05(c)(2)*)
 - (a) Dates covered during the reporting period;
 - (b) Amount of VOC used during the reporting period;
 - (c) Amount of VOC emitted during the reporting period;
 - (d) Description of the cause of the exceedance; and
 - (e) Description of any corrective action taken.

- A semi-annual Subpart BBB compliance report shall be submitted to the Department according the following schedule: (§60.546(f))

Reporting Period	Due Date
September 1 st thru February 28 th (or 29 th)	April 29 th
March 1 st thru August 31 st	October 30 th

- Each semi-annual Subpart BBB compliance report shall include the following: (§60.546(f))
 - Facility name and address;
 - Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report as outlined in General Proviso No. 9;
 - Date of report and beginning and ending dates of the reporting period;
 - A detailed description of each monthly average VOC emission rate that exceeds the VOC emission limit;
 - If no exceedance occurred during the reporting period, a statement that were no deviations from the emission limitations.
- Records of HAP content of any cements or sprays used in this process shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation. (*Table 9 of 40 CFR 63 Subpart XXXX*)
- Records summarizing the mass of each cement and solvent used during each monthly reporting period shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation. (*Table 9 of 40 CFR 63 Subpart XXXX*).
- Records of all data and calculations used to determine the monthly average mass percent of each HAP in each cement or solvent used during each monthly reporting period shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation. (*Table 9 of 40 CFR 63 Subpart XXXX*).
- Records summarizing the monthly HAP emissions from these units shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation. (*Table 9 of 40 CFR 63 Subpart XXXX*).
- Monthly HAP emissions calculations shall be compiled no later than the tenth (10th) day of the month following each monthly reporting period. (*ADEM Admin. Code 335-3-16-.05(c)(2)*)
- A semi-annual Subpart XXXX compliance report shall be submitted to the Department according the following schedule: (§63.6010(b)(3) and (4))

Reporting Period	Due Date
September 1 st thru February 28 th (or 29 th)	April 29 th
March 1 st thru August 31 st	October 30 th

- Each semi-annual Subpart XXXX compliance report shall include the following: (§63.6010(c) and (d))
 - Facility name and address;
 - Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report as outlined in General Proviso No. 9;
 - Date of report and beginning and ending dates of the reporting period;
 - If no deviations occurred during the reporting period, a statement that there were no deviations from the emission limitations;
 - The emission limit option and compliance alternative method chosen;
 - If deviations occurred during the reporting period, the report must contain the following information:
 - Total operating time of each affected source during the reporting period;
 - A statement of the cause of each deviation;
 - A description of any corrective action initiated and completed.
- If notification is received by the Department indicating that the facility has eliminated or reformulated cement and solvent so that the source can demonstrate compliance using the purchase alternative method in §63.5985(a), future compliance reports for this unit may be submitted annually.

Emissions:

Per air permit application forms submitted, the expected emissions from this unit are as follows:

Emission Point	Pollutant	Allowable Emissions		Uncontrolled Potential Emissions		Controlled Potential Emissions	
		(g/tread)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)
EU003	VOC	10	131.2	21.22	93.1		

Emission Point	Pollutant	Allowable Emissions		Uncontrolled Potential Emissions		Controlled Potential Emissions	
		(g/Mg)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)
EU003	Listed HAP	1,000	N/A	<0.1	<0.1		
	Non-Listed HAP	10,000	N/A	<0.1	<0.1		

Tire Building

This process (collectively referred to as EU004) consists of the following units:

- 1st and 2nd Stage Tire Building (including 7 new tires builders from the “STS” project in 2007)
- Decomplexing (includes recoup oven)

Modification:

On August 23, 2007, the facility was issued Air Permit 413-0024-X111 to install six 1st and 2nd stage tire builders. The tire builders were designated for the facility new “Specialty Racing Tires” production. On April 17, 2008, an application was received to install an additional tire builder. Air Permit 413-0024-X111 was reissued on May 13, 2008. This project is being incorporated into the MSOP during this renewal process.

On November 16, 2009, the Department approved a Section 502(b)(10) – Operational Flexibility modification request from BF Goodrich Tire Manufacturing (BFG3) in Tuscaloosa, Alabama. BFG3 installed an electric recoup oven as apart of the tire building process. This oven allows BFG3 to improve the way they handle tire repair at the end of tire building called “decomplexing”. When a tire that does not meet the quality assurance specification at tire building, the tire is torn apart and reworked to some extent depending on the flaw. This process was done with heptane being used to assist in breaking down the tire. The oven would be heated to approximately 115°C. Using this oven to slightly heat the flawed tire results in much less heptane used to break down the tire; therefore, resulting in a reduction in VOC emissions.

Applicability:

- These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, “*Major Source Operating Permits*”.
- Per §60.540(a), these units are not subject to the applicable provisions of 40 CFR 60 Subpart BBB, “*Standards of Performance for the Rubber Tire Manufacturing Industry*”. These units were installed in 1970, prior to the applicability date of January 20, 1983.
- Per §63.5982(b)(1), these units are subject to the applicable provisions of 40 CFR 63 Subpart XXXX, “*National Emissions Standards for Hazardous Air Pollutants for Rubber Tire Manufacturing*”.
- Per §63.6013, these units are subject to the applicable provisions of 40 CFR 63 Subpart A, “*General Provisions*” as listed in Table 17 of 40 CFR 63 Subpart XXXX.
- These units are not subject to 40 CFR 64, *Compliance Assurance Monitoring*. Emissions from these units are uncontrolled.

Emissions Standards:

- HAP

BFG has been complying with the subpart using the Monthly Average Alternative without an Add-on Control Device – Constituent Based Option, as outlined in §63.5985(b) and Option 1 of

Table 1 of 40 CFR 63 Subpart XXXX. The facility intends to continue to comply using this method.

HAP emissions are limited to the following as stated in Option 1 of Table 1 to Subpart XXXX:

- Emissions of each HAP listed in Table 16 of Subpart XXXX shall not exceed 1,000 grams of HAP per megagram (2 lb per ton) of total cements and solvents used.
- Emissions of each HAP not listed in Table 16 of Subpart XXXX shall not exceed 10,000 grams of HAP per megagram (20 lb per ton) of total cements and solvents used

Compliance and Performance Test Methods and Procedures:

- Method 311 of 40 CFR 63 Appendix A or supplier formulation data or shall be used in the determination of HAP content in any cement or solvent used in this process. (§63.5994(a))
- In order to demonstrate compliance with the HAP constituent emission limits in Option 1 of Table 1, the following procedures shall be used: (§63.5994(b))
 - Determine the mass percent of each HAP in each cement and solvent used in this process.
 - Calculate the HAP emission rate for each monthly operating period using the following equation:

$$E_{\text{month}} = \frac{\left[\sum_{i=1}^n (HAP_i)(TMASS_i) \right] (10^6)}{\sum_{i=1}^n TMASS_i}$$

Where:

E_{month} = mass of specific HAP emitted per total mass cements and solvents form all cements and solvents used in tire production per month (g/Mg)

HAP_i = mass percent (expressed as a decimal) of the specific HAP in cement and solvent “i” as purchased

$TMASS_i$ = total mass of cement and solvent “i” used in the month (g)

n = number of cements and solvents used during the month

Emission Monitoring:

- Emissions from these units shall be monitored through recordkeeping practices.

Recordkeeping and Reporting Requirements:

- Records of HAP content of any cements or sprays used in this process shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation. (Table 9 of 40 CFR 63 Subpart XXXX)
- Records summarizing the mass of each cement and solvent used during each monthly reporting period shall be kept in a permanent form suitable for inspection and shall be made available to the

permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation. (*Table 9 of 40 CFR 63 Subpart XXXX*).

- Records of all data and calculations used to determine the monthly average mass percent of each HAP in each cement or solvent used during each monthly reporting period shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation. (*Table 9 of 40 CFR 63 Subpart XXXX*).
- Records summarizing the monthly HAP emissions from these units shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation. (*Table 9 of 40 CFR 63 Subpart XXXX*).
- Monthly HAP emissions calculations shall be compiled no later than the tenth (10th) day of the month following each monthly reporting period. (*ADEM Admin. Code 335-3-16-.05(c)(2)*)
- A semi-annual Subpart XXXX compliance report shall be submitted to the Department according to the following schedule: (*§63.6010(b)(3) and (4)*)

Reporting Period	Due Date
September 1 st thru February 28 th (or 29 th)	April 29 th
March 1 st thru August 31 st	October 30 th

- Each semi-annual Subpart XXXX compliance report shall include the following: (*§63.6010(c) and (d)*)
 - Facility name and address;
 - Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report as outlined in General Proviso No. 9;
 - Date of report and beginning and ending dates of the reporting period;
 - If no deviations occurred during the reporting period, a statement that there were no deviations from the emission limitations;
 - The emission limit option and compliance alternative method chosen;
 - If deviations occurred during the reporting period, the report must contain the following information:
 - Total operating time of each affected source during the reporting period;
 - A statement of the cause of each deviation;
 - A description of any corrective action initiated and completed.
- If notification is received by the Department indicating that the facility has eliminated or reformulated cement and solvent so that the source can demonstrate compliance using the purchase alternative method in §63.5985(a), future compliance reports for this unit may be submitted annually.

Emissions:

Per air permit application forms submitted, the emissions from this unit are as follows:

Emission Point	Pollutant	Allowable Emissions		Uncontrolled Potential Emissions		Controlled Potential Emissions	
		(g/tread)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)
EU004	VOC	N/A	N/A	3.8	16.8		

Emission Point	Pollutant	Allowable Emissions		Uncontrolled Potential Emissions		Controlled Potential Emissions	
		(g/Mg)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)
EU004	Listed HAP	1,000	N/A	<0.1	<0.1		
	Non-Listed HAP	10,000	N/A	<0.1	<0.1		

Curing

This process (collectively referred to EU005) consists of the following units:

- 162 Curing Presses (including STS presses)
- 5 Green Tire Spraying Units 1, 4, 5, 6 and STS unit

Modification:

On June 25, 2007, the Department received an Air Permit application from BF Goodrich Tire Manufacturing located in Tuscaloosa, Alabama. The facility proposed to install racing specialty tire production equipment. The production equipment included six 1st and 2nd stage tire builders, seven curing presses, one manual green tire sprayer, and one RIS Grinder (C-module). The rubber for the new production equipment is being supplied by existing rubber mixing, extruding, and cementing processes.

On August 23, 2007, the facility was issued Air Permit 413-0024-X112 to install Seven Curing Presses and One Manual Green Tire Sprayer. This project is being incorporated into the MSOP during this renewal process.

On July 17, 2008, the Department approved a 502 (b)(10)-Flexibility modification for replacement of green tire sprayer. The purpose was to replace the older No. 2 green tire painter with the more reliable unit designated as No. 6. The new painter is easier to operate and provided more flexibility to the facility. Compliance with the 1.0% by weight VOC limit also applies to No. 6 sprayer.

Applicability:

- These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, *“Major Source Operating Permits”*.
- These sources are subject to ADEM Admin. Code R. 335-3-4-.04(1), *“Control of Particulate Emissions for Process Industries - General”*.
- These sources are subject to ADEM Admin. Code R. 335-3-4-.01(1), *“Control of Particulate Emissions – Visible Emissions”*.
- These units have enforceable limits in place in order to prevent them from being subject to the provisions of ADEM Admin. Code R. 335-3-14-.04. *“Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]”*.
- Per §60.540(a), the green tire sprayers are subject to the applicable provisions of 40 CFR 60 Subpart BBB, *“Standards of Performance for the Rubber Tire Manufacturing Industry”*.
- The green tire sprayers are subject to the applicable provisions of 40 CFR 60 Subpart A, *“General Provisions”*.
- Per §63.5982(b)(1), the green tire sprayers are subject to the applicable provisions of 40 CFR 63 Subpart XXXX, *“National Emissions Standards for Hazardous Air Pollutants for Rubber Tire Manufacturing”*.
- Per §63.6013, the green tire sprayers are subject to the applicable provisions of 40 CFR 63 Subpart A, *“General Provisions”* as listed in Table 17 of 40 CFR 63 Subpart XXXX.

- These units are not subject to 40 CFR 64, *Compliance Assurance Monitoring*. The Green Tire Spraying Units utilize baffles to reduce overspray. Potential pre-control PM emissions from each unit are below the major source threshold.

Emissions Standards:

- *Opacity*

ADEM Admin. Code R. 335-3-4-.01(1)(a)(b), states no person shall discharge particulate emissions of an opacity greater than that designated as twenty (20%) opacity, as determined by a six minute average. During one six (6) minute period in any sixty (60) minute period, a person may discharge into the atmosphere from any source of emission forty (40%) percent opacity.

- *PM*

These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.04(1), “*Control of Particulate Emissions for Process Industries - General*”, which specifies that particulate emissions shall not exceed that which is determined by the following equation for a Class I County:

$$E = 3.59P^{0.62} \quad \text{or} \quad E = 17.31P^{0.16}$$

(for $P < 30$ TPH) (for $P \geq 30$ TPH)

Where: E = emissions in lb/hr
 P = process weight in TPH

- *VOC*

Volatile Organic Compound (VOC) content of the green tire spray shall not exceed 1.0% by weight. (ADEM Admin. Code R. 335-3-14-.04 – *Anti-PSD*)

As stated in 40 CFR §60.542(a)(5), VOC emissions from each inside green tire spraying operation where only water-based sprays are used shall not exceed 1.2 grams (0.0026 lb) of VOC per tire sprayed each month.

As stated in 40 CFR §60.542(a)(5), VOC emissions from each inside green tire spraying operation where only water-based sprays are used shall not exceed 9.3 grams (0.021 lb) of VOC per tire sprayed each month.

The facility shall demonstrate compliance with these limits by using water-based sprays containing less than 1 percent, by weight, of VOC

The owner or operator of each green tire spraying operation using only water-based sprays (inside and/or outside) containing less than 1.0 percent, by weight, of VOC is not required to conduct a monthly performance test as described in 40CFR60.543(d). In lieu of conducting a monthly performance test, the owner or operator of each green tire spraying operation shall submit formulation data or the results of Method 24 analysis semi-annually to verify the VOC content of each green tire spray material in use, provided the spraying formulation has not changed during the previous 6 months. If the spray material formulation changes, formulation data or Method 24 analysis of the new spray shall be conducted to determine the VOC content of the spray and

reported within 30 days. The owner or operator shall maintain records of formulation data or the results of Method 24 analysis conducted to verify the VOC content of the spray on site.

- *HAP*

BFG has been complying with the subpart using the Monthly Average Alternative without an Add-on Control Device – Constituent Based Option, as outlined in §63.5985(b) and Option 1 of Table 1 of 40 CFR 63 Subpart XXXX. The facility intends to continue to comply using this method.

HAP emissions are limited to the following as stated in Option 1 of Table 1 to Subpart XXXX:

- Emissions of each HAP listed in Table 16 of Subpart XXXX shall not exceed 1,000 grams of HAP per megagram (2 lb per ton) of total cements and solvents used.
- Emissions of each HAP not listed in Table 16 of Subpart XXXX shall not exceed 10,000 grams of HAP per megagram (20 lb per ton) of total cements and solvents used

Compliance and Performance Test Methods and Procedures:

- Formulation data or the results of Method 24 analyses for the water based sprays containing less than 1.0 percent VOC (by weight) shall be submitted to the Department annually, provided that the formula has not changed during the previous twelve (12) months. (§60.543(b)(4))
- Method 311 of 40 CFR 63 Appendix A or supplier formulation data or shall be used in the determination of HAP content in any cement or solvent used in this process. (§63.5994(a))
- In order to demonstrate compliance with the HAP constituent emission limits in Option 1 of Table 1, the following procedures shall be used: (§63.5994(b)(1)(2))
 - Determine the mass percent of each HAP in each cement and solvent used in this process
 - Calculate the HAP emission rate for each monthly operating period using the following equation:

$$E_{month} = \frac{\left[\sum_{i=1}^n (HAP_i)(TMASS_i) \right] (10^6)}{\sum_{i=1}^n TMASS_i}$$

Where:

E_{month} = mass of specific HAP emitted per total mass cements and solvents from all cements and solvents used in tire production per month (g/Mg)

HAP_i = mass percent (expressed as a decimal) of the specific HAP in cement and solvent “i” as purchased

$TMASS_i$ = total mass of cement and solvent “i” used in the month (g)

n = number of cements and solvents used during the month

- If testing is required, particulate matter (PM) emission shall be determined in accordance with Method 5 of 40 CFR 60, Appendix A.

- Visible emissions observations (VEO) shall be conducted in accordance with Method 9 40 CFR 60, Appendix A.

Emission Monitoring:

- Emissions from these units shall be monitored through recordkeeping practices.

Recordkeeping and Reporting Requirements:

- Records of VOC content of any sprays used in this process shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation. (*ADEM Admin. Code 335-3-16-.05(c)(2)*)
- Green Tire Spray formulation data shall be submitted to the Department within sixty (60) days of end of each calendar year, provided that the spray formulation has not changed in the previous twelve (12) months [*§60.546(j)*].
- If the spray formulation changes before the end of the annual twelve (12) month reporting period, formulation data or Method 24 analysis results shall be reported to the Department within thirty (30) days of the change [*§60.546(j)*].
- During any month, twelve (12) month period, or other compliance period during which there is an exceedance of the VOC emission limit, the Department shall be notified in writing within ten (10) days of determining the exceedance. The notification shall include the following: (*§60.546(f)*)
 - (a) Dates covered during the reporting period;
 - (b) Amount of VOC used during the reporting period;
 - (c) Amount of VOC emitted during the reporting period;
 - (d) Description of the cause of the exceedance; and
 - (e) Description of any corrective action taken.
- Records of HAP content of any sprays used in this process shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation. (*Table 9 of 40 CFR 63 Subpart XXXX*)
- Records summarizing the mass of each spray used during each monthly reporting period shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation. (*Table 9 of 40 CFR 63 Subpart XXXX*).
- Records of all data and calculations used to determine the monthly average mass percent of each HAP in each spray used during each monthly reporting period shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation. (*Table 9 of 40 CFR 63 Subpart XXXX*).
- Records summarizing the monthly HAP emissions from these units shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request.

These records shall be maintained for at least five (5) years from the date of generation. (*Table 9 of 40 CFR 63 Subpart XXXX*).

- Monthly HAP emissions calculations shall be compiled no later than the tenth (10th) day of the month following each monthly reporting period. (*ADEM Admin. Code 335-3-16-.05(c)(2)*)
- A semi-annual Subpart XXXX compliance report shall be submitted to the Department according to the following schedule: (*§63.6010(b)(3) and (4)*)

Reporting Period	Due Date
September 1 st thru February 28 th (or 29 th)	April 29 th
March 1 st thru August 31 st	October 30 th

- Each semi-annual Subpart XXXX compliance report shall include the following: (*§63.6010(c) and (d)*)
 - Facility name and address;
 - Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report as outlined in General Proviso No. 9;
 - Date of report and beginning and ending dates of the reporting period;
 - If no deviations occurred during the reporting period, a statement that there were no deviations from the emission limitations;
 - The emission limit option and compliance alternative method chosen;
 - If deviations occurred during the reporting period, the report must contain the following information:
 - Total operating time of each affected source during the reporting period;
 - A statement of the cause of each deviation;
 - A description of any corrective action initiated and completed.
- If notification is received by the Department indicating that the facility has eliminated or reformulated cement and solvent so that the source can demonstrate compliance using the purchase alternative method in §63.5985(a), future compliance reports for this unit may be submitted annually.

Emissions:

Per air permit application forms submitted, the total emissions from these units are as follows:

Emission Point	Pollutant	Allowable Emissions	Uncontrolled Potential Emissions		Controlled Potential Emissions	
		(% by weight)	(lb/hr)	(TPY)	(lb/hr)	(TPY)
EU005	VOC	1.0	8.51	37.11	N/A	N/A

Emission Point	Pollutant	Allowable Emissions		Uncontrolled Potential Emissions		Controlled Potential Emissions	
		(g/Mg)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)
EU005	Listed (Table 16 – 40 CFR 63 Subpart XXXX) HAP	1,000	N/A	0.20	0.89		
	Non-Listed HAP	10,000	N/A	2.51	11.0		

Emission Point	Pollutant	Allowable Emissions ^a		Uncontrolled Potential Emissions		Controlled Potential Emissions	
		(lb/hr)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)
EU005	PM	24.0	105	2.55	10.2	0.46	2.0

^a – Allowable emissions are total allowable from all four GTS units.

Finishing

This process, collectively referred to as EU006, consists of the following units:

- Nineteen (19) C-Modules Controlled by Nineteen (19) Cyclones
- Tire Repair Station
- R1 Repair Buffing

Modification:

On June 25, 2007, the Department received an Air Permit application from BF Goodrich Tire Manufacturing located in Tuscaloosa, Alabama. The facility proposed to install racing specialty tire production equipment. The production equipment included six 1st and 2nd stage tire builders, seven curing presses, one manual green tire sprayer, and one RIS Grinder (C-module). The rubber for the new production equipment is being supplied by existing rubber mixing, extruding, and cementing processes.

On August 23, 2007, the facility was issued Air Permit 413-0024-X113 to install One RIS Grinder (C-Module) with shared Cyclone. This project is being incorporated into the MSOP during this renewal process.

Applicability:

- These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, “*Major Source Operating Permits*”.
- These sources are subject to ADEM Admin. Code R. 335-3-4-.04(1), “*Control of Particulate Emissions for Process Industries - General*”.
- These sources are subject to ADEM Admin. Code R. 335-3-4-.01(1), “*Control of Particulate Emissions – Visible Emissions*”.
- Per §60.540(a), these units are not subject to the applicable provisions of 40 CFR 60 Subpart BBB, “*Standards of Performance for the Rubber Tire Manufacturing Industry*”. These units are not listed as affected sources.
- Per §63.5982(b)(1), the tire painting operation associated with the C-Modules and tire repairing are subject to the applicable provisions of 40 CFR 63 Subpart XXXX, “*National Emissions Standards for Hazardous Air Pollutants for Rubber Tire Manufacturing*”.
- Per §63.6013, tire painting operation and tire repairing are subject to the applicable provisions of 40 CFR 63 Subpart A, “*General Provisions*” as listed in Table 17 of 40 CFR 63 Subpart XXXX.
- These units are not subject to 40 CFR 64, *Compliance Assurance Monitoring*. The pre-control emissions from each unit are far below the major source threshold. BFG stated during the previous renewing of this permit that these units are inherent to the operation based on the fact that these units would catch fire without a cyclone to remove accumulated particulate generated during the grinding process.

Emissions Standards:

- *Opacity*

ADEM Admin. Code R. 335-3-4-.01(1)(a)(b), states no person shall discharge particulate emissions of an opacity greater than that designated as twenty (20%) opacity, as determined by a six minute average. During one six (6) minute period in any sixty (60) minute period, a person may discharge into the atmosphere from any source of emission forty (40%) percent opacity.

- *PM*

These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.04(1), “*Control of Particulate Emissions for Process Industries - General*”, which specifies that particulate emissions shall not exceed that which is determined by the following equation for a Class I County:

$$E = 3.59P^{0.62} \quad \text{or} \quad E = 17.31P^{0.16}$$

(for P < 30 TPH) (for P ≥ 30 TPH)

Where: E = emissions in lb/hr
 P = process weight in TPH

- *HAP*

BFG has been complying with the subpart using the Monthly Average Alternative without an Add-on Control Device – Constituent Based Option, as outlined in §63.5985(b) and Option 1 of Table 1 of 40 CFR 63 Subpart XXXX. The facility intends to continue to comply using this method

HAP emissions are limited to the following as stated in Option 1 of Table 1 to Subpart XXXX:

- Emissions of each HAP listed in Table 16 of Subpart XXXX shall not exceed 1,000 grams of HAP per megagram (2 lb per ton) of total cements and solvents used.
- Emissions of each HAP not listed in Table 16 of Subpart XXXX shall not exceed 10,000 grams of HAP per megagram (20 lb per ton) of total cements and solvents used

Compliance and Performance Test Methods and Procedures:

- In order to demonstrate compliance with the HAP constituent emission limits in Option 1 of Table 1, the following procedures shall be used: (§63.5994(b)(1)(2))
 - Determine the mass percent of each HAP in each cement and solvent used in this process
 - Calculate the HAP emission rate for each monthly operating period using the following equation:

$$E_{month} = \frac{\left[\sum_{i=1}^n (HAP_i)(TMASS_i) \right] (10^6)}{\sum_{i=1}^n TMASS_i}$$

Where:

E_{month} = mass of specific HAP emitted per total mass cements and solvents from all cements and solvents used in tire production per month (g/Mg)
 HAP_i = mass percent (expressed as a decimal) of the specific HAP in cement and solvent "i" as purchased
 TMASS_i = total mass of cement and solvent "i" used in the month (g)
 n = number of cements and solvents used during the month

- If testing is required, particulate matter (PM) emission shall be determined in accordance with Method 5 of 40 CFR 60, Appendix A.
- Visible emissions observations (VEO) shall be conducted in accordance with Method 9 40 CFR 60, Appendix A.

Emission Monitoring:

- The facility shall properly maintain the interlock system connected to the pressure drop gauge such that the system shuts down if the pressure drop is less than eleven (11) inches of H₂O and greater than twenty-two (22) inches of H₂O.
- The differential pressure gauge shall be calibrated at least annually.
- The facility shall inspect and clean each cyclone no less frequently than annually and whenever visible emissions are observed.

Recordkeeping and Reporting Requirements:

- Records documenting date of a shutdown of the system, cause of the shutdown, and any corrective actions required shall be kept in a permanent form suitable for inspection. These records shall be maintained for a period of at least five (5) years from the date of generation and shall be made available to the permitting authority upon request.
- A semi-annual monitoring report shall be submitted to the Department according the following schedule:

Reporting Period	Due Date
September 1 st thru February 28 th (or 29 th)	April 29 th
March 1 st thru August 31 st	October 30 th

- Each semi-annual report shall contain the following information:
 - A description of every instance in which corrective action was required to be performed on any unit. This description shall include time, date, observed pressure drop, cause of the increased or decreased pressure drop, and the corrective action taken.
 - A statement certifying that all required monitoring, recordkeeping, and reporting requirements were accomplished as required.
- Records of HAP content of any sprays used in this process shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request.

These records shall be maintained for at least five (5) years from the date of generation. (*Table 9 of 40 CFR 63 Subpart XXXX*)

- Records summarizing the mass of each spray used during each monthly reporting period shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation. (*Table 9 of 40 CFR 63 Subpart XXXX*).
- Records of all data and calculations used to determine the monthly average mass percent of each HAP in each spray used during each monthly reporting period shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation. (*Table 9 of 40 CFR 63 Subpart XXXX*).
- Records summarizing the monthly HAP emissions from these units shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation. (*Table 9 of 40 CFR 63 Subpart XXXX*).
- Monthly HAP emissions calculations shall be compiled no later than the tenth (10th) day of the month following each monthly reporting period. (*ADEM Admin. Code 335-3-16-.05(c)(2)*)
- A semi-annual Subpart XXXX compliance report shall be submitted to the Department according to the following schedule: (*§63.6010(b)(3) and (4)*)

Reporting Period	Due Date
September 1 st thru February 28 th (or 29 th)	April 29 th
March 1 st thru August 31 st	October 30 th

- Each semi-annual Subpart XXXX compliance report shall include the following: (*§63.6010(c) and (d)*)
 - Facility name and address;
 - Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report as outlined in General Proviso No. 9;
 - Date of report and beginning and ending dates of the reporting period;
 - If no deviations occurred during the reporting period, a statement that there were no deviations from the emission limitations;
 - The emission limit option and compliance alternative method chosen;
 - If deviations occurred during the reporting period, the report must contain the following information:
 - Total operating time of each affected source during the reporting period;
 - A statement of the cause of each deviation;
 - A description of any corrective action initiated and completed.
- If notification is received by the Department indicating that the facility has eliminated or reformulated cement and solvent so that the source can demonstrate compliance using the

purchase alternative method in §63.5985(a), future compliance reports for this unit may be submitted annually.

Emissions:

Per air permit application forms submitted, the total emissions from this unit are as follows:

Emission Point	Pollutant	Allowable Emissions		Uncontrolled Potential Emissions		Controlled Potential Emissions	
		(lb/hr)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)
EU006	VOC	N/A	N/A	3.88	17.03		

Emission Point	Pollutant	Allowable Emissions		Uncontrolled Potential Emissions		Controlled Potential Emissions	
		(g/Mg)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)
EU006	Listed (Table 16 – 40 CFR 63 Subpart XXXX) HAP	1,000	N/A	0.07	0.31		
	Non-Listed HAP	10,000	N/A				

Emission Point	Pollutant	Allowable Emissions ^a		Uncontrolled Potential Emissions		Controlled Potential Emissions	
		(lb/hr)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)
EU006	PM	23.6	103.4	10.6	61.2	1.06	6.12

^a – Allowable emissions include all nineteen C-modules.

Two (2) 63.4 MMBtu/hr Natural Gas, No. 2, No. 5, and No. 6 Fuel Oil Fired Boilers

Unit No.	Rated Size	Fuel	Date Installed
EU007	63.4 MMBtu/hr	NG and No. 2, 5, and 6 FO	1945
EU007	63.4 MMBtu/hr	NG and No. 2, 5, and 6 FO	1945

Applicability:

- These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, “*Major Source Operating Permits*”.
- These units are subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.01(1), “*Visible Emissions*”.
- These units are subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.03(1), “*Control of Particulate Emissions in Fuel Burning Equipment*” for a Class I County.
- These units are subject to the applicable requirements of ADEM Admin. Code R. 335-3-5-.01(1)(a), “*Control of Sulfur Compound Emissions from Fuel Combustions*”. However, these units have limits in place which limit sulfur dioxide emissions.
- These units have enforceable limits in place in order to avoid being subject to the applicable provisions of ADEM Admin. Code R. 335-3-14-.04. “*Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]*”.
- These boilers are not subject to the applicable requirements of 40 CFR 60 Subpart D, “*Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*”. These units were built prior to the applicability date of June 9, 1989. (§60.40c(a))
- Per ADEM Admin. Code 335-3-11-.01 and §63.7485, these boilers are subject to the applicable requirements of 40 CFR 63 Subpart DDDDD, “*National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters*”. However, this subpart was vacated on June 8, 2007. Requirements from this subpart will not be included in the permit.
- These units are not subject to 40 CFR 64, “*Compliance Assurance Monitoring*”. These units are uncontrolled.

Emissions Standards:

- *Opacity*

ADEM Admin. Code R. 335-3-4-.01(1)(a)(b), states no person shall discharge particulate emissions of an opacity greater than that designated as twenty (20%) opacity, as determined by a six minute average. During one six (6) minute period in any sixty (60) minute period, a person may discharge into the atmosphere from any source of emission forty (40%) percent opacity.

- *Particulate*

These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.03(1), “*Control of Particulate Emissions for Fuel Burning Equipment*”, which specifies that particulate emissions from each indirect fired heating unit shall not exceed that as determined by the following equation for a Class I County:

$$E = 1.38H^{0.44}$$

Where: E = emissions in lb/MMBtu
H = heat input in MMBtu/hr

- *Sulfur Dioxide*

The sulfur content of the fuel oil burned in these boilers shall not exceed 1.00 percent by weight. (ADEM Admin. Code R. 335-3-14-.04 – Anti-PSD).

Compliance and Performance Test Methods and Procedures:

- If testing is required, particulate matter (PM) emission shall be determined in accordance with Method 5 of 40 CFR 60, Appendix A.
- If testing is required, sulfur dioxide (SO₂) emissions shall be determined in accordance with Method 6 of 40 CFR 60, Appendix A.
- If testing is required, nitrogen oxides (NO_x) emissions shall be determined in accordance with Method 7 of 40 CFR 60, Appendix A.
- If testing is required, volatile organic compound (VOC) emissions shall be determined in accordance with Method 25A of 40 CFR 60, Appendix A.
- If testing is required, carbon monoxide (CO) emissions shall be determined in accordance with Method 10 of 40 CFR 60, Appendix A.
- Visible emissions observations (VEO) shall be conducted in accordance with Method 9 40 CFR 60, Appendix A.
- The sulfur content of fuel oil burned in these boilers shall be determined by procedures found in ASTM 129-00.

Emission Monitoring:

- When firing fuel oil, an observation of instantaneous visible emissions from the stacks associated with these units shall be accomplished daily by an individual certified to determine opacity.
- If the observed instantaneous opacity is greater than ten (10%) percent, a visible emissions observation shall be conducted within **thirty (30) minutes** of the observation in accordance with 40 CFR 60 Appendix A, Method 9 for a minimum of twelve (12) consecutive minutes.
- If the average opacity during the Method 9 visible emission observation exceeds ten (10%) percent, corrective action must be initiated within **two (2) hours**.
- The sulfur content of fuel oil burned in these boilers shall be determined by fuel certifications provided by the fuel oil supplier or laboratory test results obtained by the permittee.

Recordkeeping and Reporting Requirements:

- If utilized, fuel oil supplier certificates shall contain the name of the oil supplier and a statement from the oil supplier that the oil complies with the sulfur content limit, and shall be kept in a permanent form suitable for inspection for a period of five (5) years from the date of generation and shall be made available upon request.
- A semi-annual report summarizing the type and quantity of each fuel burned in this unit shall be submitted to the Department **within sixty (60) days of the end of each semi-annual reporting period** as determined by the anniversary dates of the permit. The semi-annual monitoring periods shall cover the following dates:

Reporting Period	Due Date
September 1 st thru February 28 th (or 29 th)	April 29 th
March 1 st thru August 31 st	October 30 th

- Each semi-annual report shall include the following:
 1. Calendar dates covered in the reporting period;
 2. A tabulated summary of fuel oil sulfur contents determined by fuel oil supplier certification(s) or laboratory analyses;
 3. A statement of certification of truth, accuracy, and completeness as described in General Proviso No. 9; and
 4. Signature of the responsible official as required by General Proviso No. 9.
- Records of the observation date, observation time, emission point designation, name of the observer, expiration date of observer's certification, observed opacity, and any corrective actions taken during each visible emissions observation shall be kept in a permanent form suitable for inspection. These records shall be maintained for a period of at least five (5) years from the date of generation and shall be made available to the permitting authority upon request.
- If a visible emissions observation utilizing Method 9 is required, the results shall be documented using the ADEM visible emissions observation report. These records shall be maintained for a period of at least five (5) years from the date of generation and shall be made available to the permitting authority upon request.
- A semi-annual monitoring report shall be submitted to the Department **within sixty (60) days of the end of each semi-annual reporting period** as determined by the anniversary dates of the permit. The semi-annual monitoring periods shall cover the following dates:

Reporting Period	Due Date
September 1 st thru February 28 th (or 29 th)	April 29 th
March 1 st thru August 31 st	October 30 th

- This report shall include the following:
 1. Calendar dates covered in the reporting period;
 2. All visible emissions (VE) exceedances;
 3. A description of the cause of any exceedance;
 4. A description of any corrective action taken;

5. A statement of certification of truth, accuracy, and completeness as described in General Proviso No. 9; and
6. Signature of the responsible official as required by General Proviso No. 9.

Emissions:

Per air permit application forms submitted, the emissions from these boilers are as follows:

Units	Pollutant	Allowable Emissions		Uncontrolled Potential Emissions	
		(lb/hr)	(TPY)	(lb/hr)	(TPY)
EU007	PM	28.0	123	9.72	42.58
	CO	129	563	10.14	22.22
	NO _x	N/A	N/A	46.49	101.82
	SO ₂	146	639	132.72	290.65
	VOC	N/A	N/A	0.33	2.91

Two (2) 80.0 MMBtu/hr Natural Gas, No. 2, No. 5, and No. 6 Fuel Oil Fired Boilers

Unit No.	Rated Size	Fuel	Date Installed
EU008	80.0 MMBtu/hr	NG and No. 2, 5, and 6 FO	1971
EU008	80.0 MMBtu/hr	NG and No. 2, 5, and 6 FO	1971

Applicability:

- These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, “*Major Source Operating Permits*”.
- These units are subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.01(1), “*Visible Emissions*”.
- These units are subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.03(1), “*Control of Particulate Emissions in Fuel Burning Equipment*” for a Class I County.
- These units are subject to the applicable requirements of ADEM Admin. Code R. 335-3-5-.01(1)(a), “*Control of Sulfur Compound Emissions from Fuel Combustions*”. However, these units have limits in place which limit sulfur dioxide emissions.
- These units have enforceable limits in place in order to avoid being subject to the applicable provisions of ADEM Admin. Code R. 335-3-14-.04. “*Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]*”.
- These boilers are not subject to the applicable requirements of 40 CFR 60 Subpart D, “*Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*”. These units were built prior to the applicability date of June 9, 1989. (§60.40c(a))
- Per ADEM Admin. Code 335-3-11-.01 and §63.7485, these boilers are subject to the applicable requirements of 40 CFR 63 Subpart DDDDD, “*National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters*”. However, this subpart was vacated on June 8, 2007. Requirements from this subpart will not be included in the permit.
- These units are not subject to 40 CFR 64, “*Compliance Assurance Monitoring*”. These units are uncontrolled.

Emissions Standards:

- *Opacity*

ADEM Admin. Code R. 335-3-4-.01(1)(a)(b), states no person shall discharge particulate emissions of an opacity greater than that designated as twenty (20%) opacity, as determined by a six minute average. During one six (6) minute period in any sixty (60) minute period, a person may discharge into the atmosphere from any source of emission forty (40%) percent opacity.

- *Particulate*

These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.03(1), “Control of Particulate Emissions for Fuel Burning Equipment”, which specifies that particulate emissions from each indirect fired heating unit shall not exceed that as determined by the following equation for a Class I County:

$$E = 1.38H^{0.44}$$

Where: E = emissions in lb/MMBtu
H = heat input in MMBtu/hr

- *Sulfur Dioxide*

The sulfur content of the fuel oil burned in these boilers shall not exceed 1.00 percent by weight. (ADEM Admin. Code R. 335-3-14-.04 – Anti-PSD).

Compliance and Performance Test Methods and Procedures:

- If testing is required, particulate matter (PM) emission shall be determined in accordance with Method 5 of 40 CFR 60, Appendix A.
- If testing is required, sulfur dioxide (SO₂) emissions shall be determined in accordance with Method 6 of 40 CFR 60, Appendix A.
- If testing is required, nitrogen oxides (NO_x) emissions shall be determined in accordance with Method 7 of 40 CFR 60, Appendix A.
- If testing is required, volatile organic compound (VOC) emissions shall be determined in accordance with Method 25A of 40 CFR 60, Appendix A.
- If testing is required, carbon monoxide (CO) emissions shall be determined in accordance with Method 10 of 40 CFR 60, Appendix A.
- Visible emissions observations (VEO) shall be conducted in accordance with Method 9 40 CFR 60, Appendix A.
- The sulfur content of fuel oil burned in these boilers shall be determined by procedures found in ASTM 129-00.

Emission Monitoring:

- When firing fuel oil, an observation of instantaneous visible emissions from the stacks associated with these units shall be accomplished daily by an individual certified to determine opacity.
- If the observed instantaneous opacity is greater than ten (10%) percent, a visible emissions observation shall be conducted within **thirty (30) minutes** of the observation in accordance with 40 CFR 60 Appendix A, Method 9 for a minimum of twelve (12) consecutive minutes.
- If the average opacity during the Method 9 visible emission observation exceeds ten (10%) percent, corrective action must be initiated within **two (2) hours**.
- The sulfur content of fuel oil burned in these boilers shall be determined by fuel certifications provided by the fuel oil supplier or laboratory test results obtained by the permittee.

Recordkeeping and Reporting Requirements:

- If utilized, fuel oil supplier certificates shall contain the name of the oil supplier and a statement from the oil supplier that the oil complies with the sulfur content limit, and shall be kept in a permanent form suitable for inspection for a period of five (5) years from the date of generation and shall be made available upon request.
- A semi-annual report summarizing the type and quantity of each fuel burned in this unit shall be submitted to the Department **within sixty (60) days of the end of each semi-annual reporting period** as determined by the anniversary dates of the permit. The semi-annual monitoring periods shall cover the following dates:

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 4. Signature of the responsible official as required by General Proviso No. 9.
- Records of the observation date, observation time, emission point designation, name of the observer, expiration date of observer's certification, observed opacity, and any corrective actions taken during each visible emissions observation shall be kept in a permanent form suitable for inspection. These records shall be maintained for a period of at least five (5) years from the date of generation and shall be made available to the permitting authority upon request.
- If a visible emissions observation utilizing Method 9 is required, the results shall be documented using the ADEM visible emissions observation report. These records shall be maintained for a period of at least five (5) years from the date of generation and shall be made available to the permitting authority upon request.
- A semi-annual monitoring report shall be submitted to the Department **within sixty (60) days of the end of each semi-annual reporting period** as determined by the anniversary dates of the permit. The semi-annual monitoring periods shall cover the following dates:

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- This report shall include the following:
 1. Calendar dates covered in the reporting period;
 2. All visible emissions (VE) exceedances;
 3. A description of the cause of any exceedance;
 4. A description of any corrective action taken;

5. A statement of certification of truth, accuracy, and completeness as described in General Proviso No. 9; and
6. Signature of the responsible official as required by General Proviso No. 9.

Per air permit application forms submitted, the potential emissions from these boilers are as follows:

Units	Pollutant	Allowable Emissions		Uncontrolled Emissions	
		(lb/hr)	(TPY)	(lb/hr)	(TPY)
EU008	PM	32.1	141	12.27	53.73
	CO	N/A	N/A	12.8	56.0
	NO _x	N/A	N/A	58.7	257
	SO ₂	179	786	167.47	733.5
	VOC	N/A	N/A	0.84	3.67